



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/551,082

09/27/2005

Hans Hannu

P18175-US1

6356

27045

7590

10/28/2008

ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVR 1-C-11  
PLANO, TX 75024

EXAMINER

BENOIT, ESTHER

ART UNIT

PAPER NUMBER

2442

MAIL DATE

DELIVERY MODE

10/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/551,082	HANNU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ESTHER BENOIT	2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 27-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/27/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/27/2005, 1/3/2007</u> .                                     | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 27-53 are pending in this application. A Preliminary Amendment filed on September 27, 2005 cancelled claims 1-26 and added claims 27-53. Claims 27-53 are presented for examination.

#### ***Information Disclosure Statement***

2. The information disclosure statement filed 9/27/2005 and 1/3/2007 fails to comply with 37 CFR 1.98(a) (2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

3. The information disclosure statement filed 9/27/2005 and 1/3/2007 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the non-patent literatures listed are missing relevant information such as date, city and/or country where published, and etc. Please check for information that is necessary for these non-patent publications to be considered. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based

Art Unit: 2442

on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

4. The copy of the reference “*Service Subscription Information management in a TINA Environment using Object-Oriented Middleware*” submitted on 1/3/2007 has not been considered because it does not appear on the IDS filed. This reference must appear on the IDS for consideration.

***Claim Rejections - 35 USC § 101***

Claims 39-53 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter. The “means for” found in claims 39-53 are directed to software, which is not patentable subject matter.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 27-53 are rejected under 35 U.S.C. 102(a) as being anticipated by Hannu et al. in RFC 3321, which was published January 2003.

With respect to 27, In *RFC 3321*, Hannu discloses initiating said message-based inter-unit communication by providing, in said first communications unit, a state comprising communications unit-associated data applicable for multiple

Art Unit: 2442

communications messages to be transmitted between said first communications unit and said second communications unit (pg. 3, Figure 1) generating a copy of said state (pg. 4, "4.1. Overview of...", lines 3-4, "If compressor...") transmitting said state copy and a first identifier of said state copy from said first communications unit to said second communications unit (pg. 7, Figure 2, *where it can be seen that  $m1(s0)$  is transmitted from the first unit to the second*) generating a second identifier based on said received state copy (pg. 5, paragraph 1, "Legend: Message 1...") comparing said received first identifier and said generated second identifier (pg. 9, "(4): If endpoint 2...") storing said state copy in said second communications unit (pg. 7, Figure 2) and processing, if said second identifier corresponds to said first identifier, a communications message of said multiple communications messages using said state or said state copy by modulating a size of said communications message based on at least a portion of said communications unit-associated data (pg. 4, "4.1. Overview of...", *where the message is compressed and decompressed*)

With respect to 28, In *RFC 3321*, Hannu discloses said first communications unit removing at least a portion of said communications unit-associated data in said state from said communications message to obtain a reduced-size communications message (pg. 4, "4.1. Overview of...", *where the message is compressed and decompressed*) and said first communications unit transmitting said reduced-size communications message to said second communications unit (pg. 7, Figure 2)

With respect to 29, In *RFC 3321*, Hannu discloses said second communications unit adding at least a portion of said communications unit-associated data in said state

Art Unit: 2442

copy to said reduced-size communications message to obtain said communications message (pg. 4, “4.1. Overview of...” )

With respect to 30, In *RFC 3321*, Hannu discloses said second communications unit removing at least a portion of said communications unit-associated data in said state copy from said communications message to obtain a reduced-size communications message (pg. 7, Figure 2) and said second communications unit transmitting said reduced-size communications message to said first communications unit (pg. 7, Figure 2)

With respect to 31, In *RFC 3321*, Hannu discloses said first communications unit adding at least a portion of said communications unit-associated data in said state to said reduced-size communications message to obtain said communications message (pg. 7, Figure 2)

With respect to 32, In *RFC 3321*, Hannu discloses storing said state copy in a compartment dedicated to said first communications unit at said second communications unit if said second identifier corresponds to said first identifier (pg. 7, Figure 2)

With respect to 33, In *RFC 3321*, Hannu discloses copying said state copy from said compartment dedicated to said first communications unit at said second communications unit to a locally available state memory at said second communications unit (pg. 7, Figure 2)

With respect to 34, In *RFC 3321*, Hannu discloses storing said state in a locally available state memory at said first communications unit (pg. 7, Figure 2)

With respect to 35, In *RFC 3321*, Hannu discloses said inter-unit communication comprises compressed message-based communication between said first and second communications unit, said method comprising the step of said first communications unit compressing said communications message based on said state, and said processing step comprises the step of said second communications unit decompressing said compressed communications message based on said state copy (pg. 7, Figure 2)

With respect to 36, In *RFC 3321*, Hannu discloses said inter-unit communication comprises compressed message-based communication between said first and second communications unit, said method comprising the step of said second communications unit compressing said communications message based on said state copy, and said processing step comprises the step of said first communications unit decompressing said compressed communications message based on said state (pg. 7, Figure 2)

With respect to 37, In *RFC 3321*, Hannu discloses said multiple communications messages are compressed using a SigComp compression (Abstract)

With respect to 38, In *RFC 3321*, Hannu discloses said second communications unit receiving an acknowledge identifier from said first communication unit (pg. 7, “5.1. Explicit Acknowledgement...”) and said second communications unit returning said acknowledge identifier to said first communications unit if said second identifier corresponds to said first identifier (pg. 7, “5.1. Explicit Acknowledgement...”)

With respect to 39, In *RFC 3321*, Hannu discloses means for receiving a copy of a state comprising communications unit-associated data applicable for multiple communications messages to be transmitted between said communications unit and said external communications unit (pg. 7, Figure 2) means for receiving a first identifier of said state copy (pg. 7, Figure 2) means for generating a second identifier based on said received state copy (pg. 5, paragraph 1, "Legend: Message 1...") means for comparing said received first identifier and said generated second identifier (pg. 9, "(4): If endpoint 2...") storing said state copy (pg. 7, Figure 2) and means, responsive to said comparing means, for processing a communications message of said multiple communications messages using said stored state copy if said second identifier corresponds to said first identifier, said processing means being configured for modulating a size of said communications message based on at least a portion of said communications unit-associated data in said state copy (pg. 4, "4.1. Overview of...", *where the message is compressed and decompressed*)

With respect to 40, In *RFC 3321*, Hannu discloses said communications message is a reduced-size communications message and processing means comprises means for adding at least a portion of said communications unit-associated data in said state copy to said reduced-size communications message (pg. 7, Figure 2)

With respect to 41, In *RFC 3321*, Hannu discloses a compressor and decompressor, said adding means being provided in said decompressor for decompressing a received compressed communications message from said external communications unit by adding said at least a portion of said communications unit-



Art Unit: 2442

associated data in said state copy to said compressed communications message (pg. 7, Figure 2)

With respect to 42, In *RFC 3321*, Hannu discloses said processing means comprises means for removing at least a portion of said communications unit-associated data in said state copy from said communications message (pg. 7, Figure 2)

With respect to 43, In *RFC 3321*, Hannu discloses a compressor and decompressor, said removing means being provided in said compressor for compressing a communications message intended to said external communications unit by removing said at least a portion of said communications unit-associated data in said state copy from said communications message (pg. 7, Figure 2)

With respect to 44, In *RFC 3321*, Hannu discloses said compressor and decompressor are configured for signal compression and decompression using a SigComp protocol (Abstract)

With respect to 45, In *RFC 3321*, Hannu discloses said comparing means is configured for generating a storing command if said second identifier corresponds to said first identifier and said storing means is configured for storing said state copy upon reception of said storing command (pg. 7, Figure 2)

With respect to 46, In *RFC 3321*, Hannu discloses said storing means is configured for storing said state copy in a compartment dedicated to said external communications unit (pg. 7, Figure 2)

With respect to 47, In *RFC 3321*, Hannu discloses means for copying said state copy from said compartment dedicated to said external communications unit to a locally available state memory (pg. 7, Figure 2)

With respect to 48, In *RFC 3321*, Hannu discloses responsive to said comparing means, for transmitting an acknowledge identifier to said external communications unit if said second identifier corresponds to said first identifier (pg. 7, “5.1. Explicit Acknowledgement...”)

With respect to 49, In *RFC 3321*, Hannu discloses means for generating a state comprising communications unit-associated data applicable for multiple communications messages to be transmitted between said communications unit and said external communications unit (pg. 7, paragraph 1, “Legend: Message 1...”)

means for storing said state (pg. 7, Figure 2) means for generating a copy of said state (pg. 4, “4.1. Overview of...”, lines 3-4, “If compressor...”)

means for providing said state copy for storage in said external communications unit and for providing a first identifier of said state copy to said external communications unit (pg. 7, Figure 2) means for receiving an acknowledge identifier from said external communications, said acknowledge identifier being transmitted in response to a correspondence between said first identifier and a second identifier, said second identifier being generated by said external communications unit based on said state copy (pg. 7, “5.1. Explicit Acknowledgement...”)

and means, responsive to said receiving means, for processing a communications message of said multiple communications messages using said stored state if said second identifier corresponds to said first identifier as determined by

Art Unit: 2442

reception of said acknowledge identifier (pg. 7, "5.1. Explicit Acknowledgement..."), said processing means being configured for modulating a size of said communications message based on at least a portion of said communications unit-associated data in said state (pg. 4, "4.1. Overview of...")

With respect to 50, In *RFC 3321*, Hannu discloses said processing means comprises means for removing at least a portion of said communications unit-associated data in said state from said communications message (pg. 7, Figure 2)

With respect to 51, In *RFC 3321*, Hannu discloses a compressor and decompressor, said removing means being provided in said compressor for compressing a communications message intended to said external communications unit by removing said at least a portion of said communications unit-associated data in said state from said communications message (pg. 7, Figure 2)

With respect to 52, In *RFC 3321*, Hannu discloses said communications message is a reduced-size communications message and processing means comprises means for adding at least a portion of said communications unit-associated data in said state to said reduced-size communications message (pg. 7, Figure 2)

With respect to 53, In *RFC 3321*, Hannu discloses a compressor and decompressor, said adding means being provided in said decompressor for decompressing a received compressed communications message from said external communications unit by adding said at least a portion of said communications unit-

Art Unit: 2442

associated data in said state to said compressed communications message (pg. 7, Figure 2)

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Esther Benoit whose telephone number is 571-270-3807. The examiner can normally be reached on Monday through Friday between 7:30 a.m and 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

E.B.  
October 22, 2008

/Andrew Caldwell/  
Supervisory Patent Examiner, Art Unit 2442